RECLAMATION
Managing Water in the West

ENVIRONMENTAL ASSESSMENT/ FINDING OF NO SIGNIFICANT IMPACT

Transfer of Stored Water From Westlands Water District to Semitropic Water Storage District

U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
Sacramento, California

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United States Department of Interior
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Semitropic Water Storage District

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FONSI No. 08-10-MP

Transfer of Stored Water From Westlands Water District to Semitropic Water Storage District

Westlands Water District (Westlands) has been participating in groundwater banking at Semitropic Water Storage District (Semitropic) since 2005 as allowed under Article 3 (d) of Westlands' interim renewal contract, Contract No. 14-06-22-495A-IR1. Westlands has requested Bureau of Reclamation approval of a proposal to transfer up to 8,086 acre-feet (af) of Westlands' water previously stored in Semitropic to Semitropic for Semitropic's use to support existing agricultural irrigation.

Reclamation proposes to approve the transfer of up to 8,086 af of previously stored water from Westlands to Semitropic in accordance with the Interim Guidelines for Implementation of the Water Transfer Provisions of the Central Valley Project Improvement Act (Title XXXIV of Public Law 102-575). Reclamation is working to develop final groundwater banking and water transfer guidelines and criteria. Approval of this and future proposals to transfer previously stored water will be subject to, and may be revised as necessary, to be consistent with any final guidelines, criteria, regulations, or policies governing the banking of Central Valley Project (CVP) water.

An environmental assessment (EA) was prepared that evaluates the potential environmental impacts, beneficial and adverse, associated with the proposed action and a no action alternative. The EA is attached for reference.

In accordance with the National Environmental Policy Act of 1969, as amended, Reclamation has found that the approval of the proposed transfer of up to 8,086 af of previously stored water from Westlands to Semitropic will not result in a significant adverse impact on the environment. Therefore, an Environmental Impact Statement is not required. Reclamation's finding that implementation of the proposed action will result in no significant impact to the quality of the human environment is supported by the following factors:

Water and Land Management: The up to 8,086 af of water that will be transferred to Semitropic is water that was previously stored by Westlands at Semitropic. The proposed action will involve water that will be: delivered using Semitropic's existing Original Banking Program (Phase 1) facilities, used for Semitropic's support of existing agricultural uses, and will occur within the CVP place-of-use. The proposed action will result in no substantial change or impact to CVP operations or to Delta pumping by the CVP.

Biological Resources: The proposed action will involve transfer of water previously banked by Westlands at Semitropic, so the water will not physically move. The water will be used for Semitropic's support of existing agricultural uses and will be made available for delivery using Semitropic's existing Phase 1 facilities. The proposed action will not change how water or land

is managed. The water transferred under the proposed action will be used to support irrigated lands already in agricultural production. No waterways or nesting areas will be created, destroyed, or modified in any way under the proposed action. Also, with implementation of the proposed action, CVP operations will be consistent with existing operating and conveyance agreements. The proposed action will be consistent with the actions covered by previous analyses and will not result in any changes from existing operations or conditions.

Because of the previously discussed factors, Reclamation has determined that the proposed action will have no effect on special status species with the potential to occur in the project area of effect. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. However, the EA was prepared in coordination with the U.S. Fish and Wildlife Service.

Cultural Resources: The proposed action will not involve any ground-disturbing activities and will not change inundation or drainage patterns. The proposed action is not the type of action that has the potential to affect historic properties as defined in 36 CFR Part 800. As a result, Reclamation will not initiate the Section 106 process of the National Historic Preservation Act.

Indian Trust Assets: No Indian Trust Assets occur within the project area. Under the proposed action, there will be no alterations of existing water rights. Therefore, no impacts to Indian Trust Assets will occur as a result of the proposed action alternative.

Environmental Justice: No long-term changes in agricultural practices or communities will result from this transfer. Accordingly, the proposed action will not have any significant or disproportionately negative impact on low-income or minority individuals within the project area.

Cumulative Impacts: The cumulative effects of the proposed action and other reasonably foreseeable actions as described in the EA will include:

- Westlands:
    - Transfer up to 8,086 af of previously banked water to Semitropic.
    - Receive 4, 350 af return of previously banked water, via exchange, from Semitropic.
    - Receive up to 650 af of 2008 South of Delta CVP water via transfer from Del Puerto Water District (DPWD).
- Semitropic:
    - Receive up to 8,086 af of water previously banked at Semitropic, via transfer from Westlands.
    - Transfer up to 7,436 af to Wheeler Ridge-Maricopa Water Storage District (WRMWSD).

- Transfer up to 650 af of 2008 State Water Project (SWP) Table A water to Oak Flat Water District (OFWD).

- WRMWSD:
  - Receive up to 7,436 af.

- OFWD:
  - Receive up to 650 af of 2008 SWP Table A water via transfer from Semitropic.

- DPWD:
  - Transfer up to 650 af of 2008 South of Delta Central Valley Project water to Westlands.

The voluntary fallowing in DPWD, that will assist the proposed transfer of up to 650 af of water to Westlands, will be for one season only and will only involve approximately 0.5 percent of the 45,000 acres of agricultural land served by DPWD, and therefore will not constitute a land use change. Should drought conditions and water supply shortages dictate fallowing next year, it is anticipated that this acreage would be planted again and different acreage would be fallowed as necessary. Therefore, the proposed action will not cumulatively contribute to any long-term land or water use changes.

Because these actions will involve South of Delta water supplies and service areas, they will result in no change to CVP operations or Delta pumping by the CVP. These actions will utilize existing conveyance facilities that are not managed for fisheries. No special status species occur in the conveyance facilities that will be utilized. The proposed voluntary land fallowing in DPWD that will assist the proposed transfer of up to 650 af of water to Westlands is not anticipated to have any effect on any species, including special status species, as it will be a short-term action lasting only one season.

The proposed action will involve relatively small amounts of water and will not contribute to any long-term land or water use changes or affect any other resource categories. Therefore, the proposed action will not significantly contribute to a cumulative impact on any resource category.

ENVIRONMENTAL ASSESSMENT

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ENVIRONMENTAL ASSESSMENT

1. INTRODUCTION

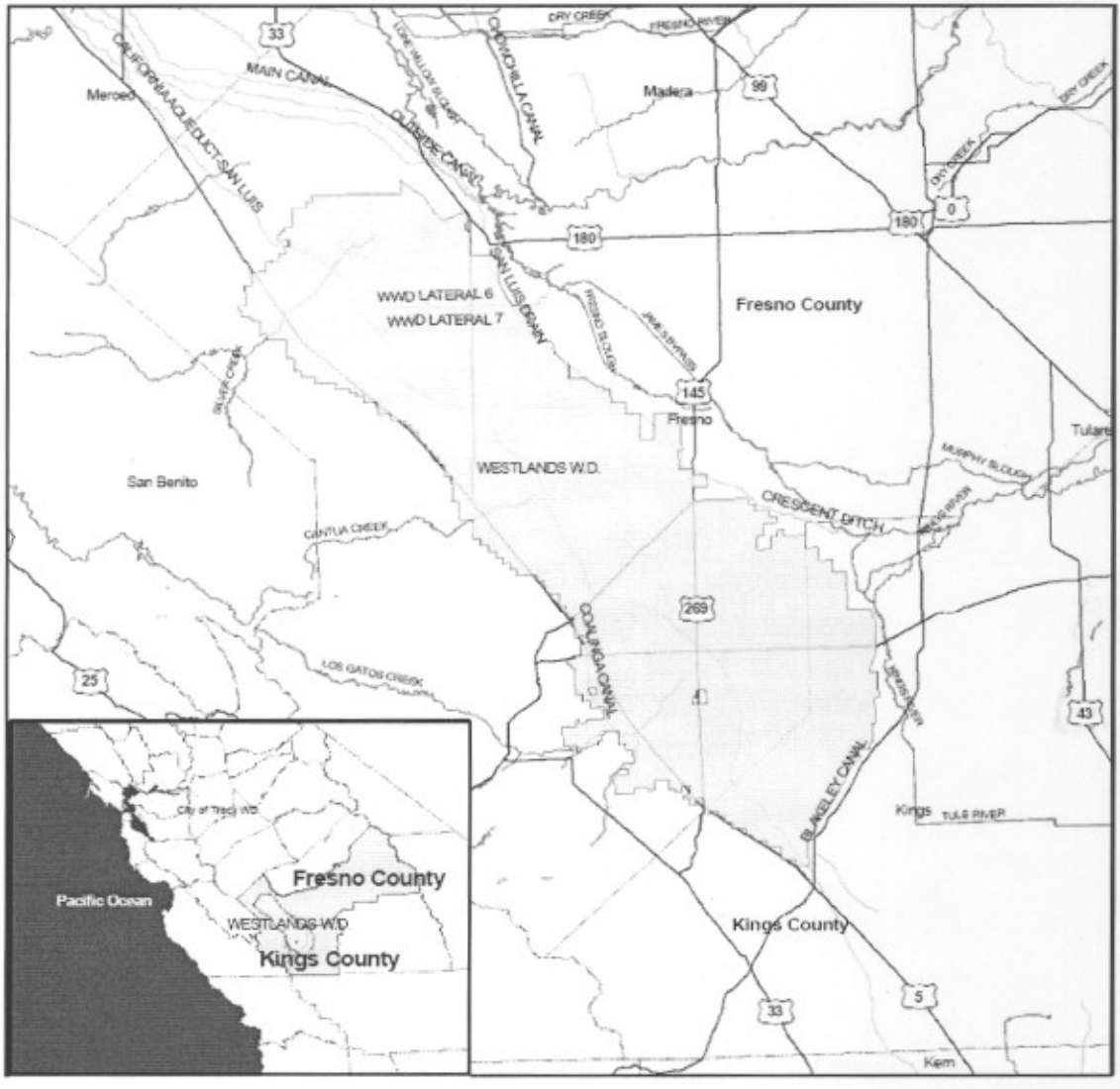
Westlands Water District (Westlands) has been participating in groundwater banking at Semitropic Water Storage District (Semitropic) since 2005 as allowed under Article 3 (d) of Westlands' interim renewal contract, Contract No. 14-06-22-495A-IR1. Westlands Water District currently has 21,571 acre-feet (af) of water that has been stored in Semitropic for more than 365 days. Westlands has requested Bureau of Reclamation approval of a proposal to transfer up to 8,086 af of Westlands' water previously stored in Semitropic to Semitropic for Semitropic's use to support existing agricultural irrigation. Transfers are authorized pursuant to the following contracting authorities and guidelines, as amended and updated and/or superseded:

- Title XXXIV CVPIA October 30, 1992, Section 3405 (a)
- Reclamation Reform Act (RRA), October 12, 1982, Section 226
- Interim Renewal Water Service Contracts for San Luis Unit
- Reclamation's Interim Guidelines for Implementation of Water Transfers Under Title XXXIV of Public Law 102-575 (Water Transfer) February 25, 1993
- Reclamation and U.S. Fish and Wildlife Service Region 1, Final Administrative Proposal on Water Transfers April 16, 1998
- Reclamation's Regional Letter, Delegation of Regional Functional Responsibilities regarding Water Transfers from the Regional Director to the Area Offices, Number 08-01 March 17, 2008

In accordance with the National Environmental Policy Act (NEPA), this Environmental Assessment (EA) has been prepared to evaluate and disclose any potential environmental impacts associated with Reclamation's approval of this proposed transfer.

1.1 PURPOSE AND NEED

On June 4, 2008, Governor Arnold Schwarzenegger signed Executive Order S-06-08 proclaiming a condition of statewide drought, and ordered the Department of Water Resources (DWR) to take immediate action to address the serious drought conditions and water delivery limitations currently existing and anticipated in the future in California. There is a need for flexibility in water management to address these conditions and

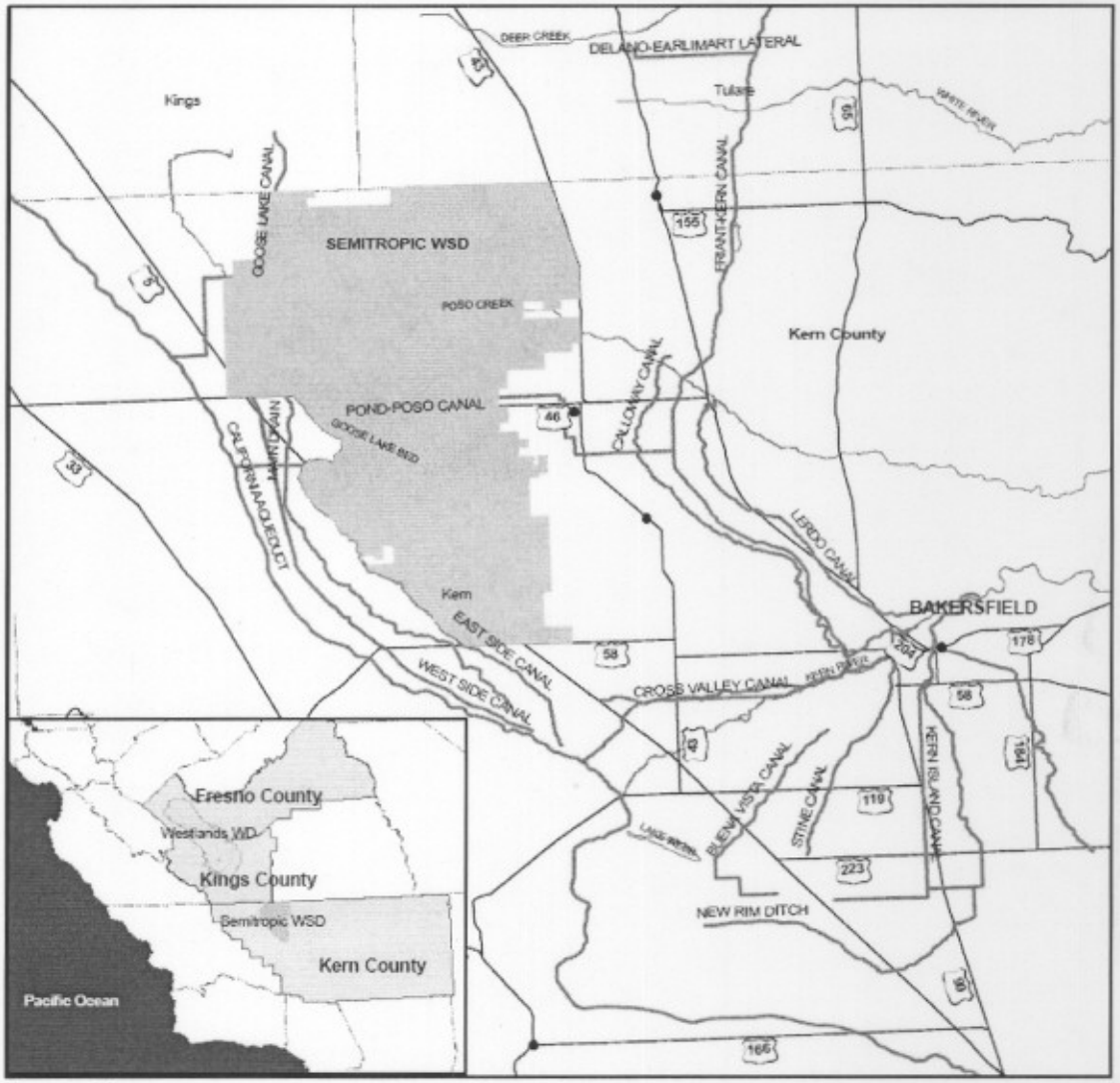


Legend

- Westlands W.D. (Incorporated Boundary)
- Highways
- Rivers
- Canals

Figure 1-1
Westlands Water District
General Location Map

Date: November 17, 2005
Path Name: K:\mxd\projects\Tracy WD.mxd



Legend

- City locations CA NV
- Canals
- Highways
- Rivers
- Canals
- Semitropic WSD
- Westlands WWD

Figure 1-2
Semitropic Water Storage District
General Location Map

Date: November 17, 2008
Path Name: K:\Semi\projects\Tracy WD.mxd

2. ALTERNATIVES

2.1 No Action Alternative

Under the no action alternative, Reclamation would not approve Westlands' request to transfer up to 8,086 af of previously stored water to Semitropic prior to January 26, 2012.

2.2 Proposed Action

Reclamation proposes to approve the transfer of up to 8,086 af of previously stored water from Westlands to Semitropic prior to January 26, 2012. Because it would involve water that Westlands had previously banked at Semitropic, water would not physically move under the proposed action. The water would be made available for delivery using Semitropic's existing Phase 1 facilities. The proposed transfer would be approved in accordance with the Interim Guidelines for Implementation of the Water Transfer Provisions of the Central Valley Project Improvement Act (Title XXXIV of Public Law 102-575). Reclamation is working to develop final groundwater banking and water transfer guidelines and criteria. Approval of this and future proposals to transfer previously stored water, however, will be subject to, and may be revised as necessary, to be consistent with any final guidelines, criteria, regulations, or policies governing the banking of Central Valley Project (CVP) water.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Several resource categories would not be affected by the proposed action, and therefore are eliminated from further detailed discussion: climate and air quality; soils, geology and mineral resources; topography; noise; transportation and traffic; recreation; aesthetics; hazardous materials, socioeconomics, and public services and utilities.

3.1 Water and Land Management

Affected Environment

Westlands

Westlands encompasses more than 600,000 acres of farmland located in western Fresno and Kings Counties and serves approximately 600 family owned farms. Westlands crop demand to irrigate the District is 1,500,000 af. Contract entitlement is about 1,180,000 af, and safe yield from aquifer is approximately 135,000 af to 200,000 af. In 2008-09, the District allocation is 40 percent of contract entitlement, or about 471,675 af. The District currently has a considerable amount of fallowed acreage, and many growers shifted to winter crops (such as wheat) to preserve more water for summer row crops and permanent plantings.

Groundwater

Westlands is located above the alluvial fan deposits between the eastward dipping marine deposits of the Coast Range and the alluvium filled San Joaquin Valley. The

groundwater basin underlying Westlands is comprised generally of two water-bearing zones: (1) an upper zone above a nearly impervious Corcoran Clay layer containing the Coastal and Sierran aquifers and (2) a lower zone below the Corcoran Clay containing the sub-Corcoran aquifer. These water-bearing zones are recharged by subsurface inflow primarily from the west and northeast, percolation of groundwater, and imported and local surface water. The Corcoran Clay separates the upper and lower water-bearing zones in the majority of Westlands. The Corcoran Clay is not continuous in the western portion of Westlands.

Groundwater pumping started in this portion of the San Joaquin Valley in the early 1900's. Prior to delivery of CVP water, the annual groundwater pumpage in Westlands ranged from 800,000 to 1,000,000 af per year during the period of 1950–1968. The majority of this pumping was from the aquifer below the Corcoran Clay, causing the sub-Corcoran piezometric groundwater surface to reach the lowest record average elevation of more than 150 feet below mean sea level by 1968. The large quantity of groundwater pumped prior to delivery of CVP water caused a significant amount of land subsidence in some areas. Subsidence permanently reduces the aquifer capacity because of the compaction of the water-bearing sediments. Westlands has implemented a groundwater management program to reduce the potential for future extreme subsidence. After implementation of the CVP operations in Westlands, groundwater pumping declined to about 200,000 af per year, or less, in the 1970's. The reduction in groundwater pumping stabilized groundwater depths and in most portions of Westlands groundwater levels significantly recovered.

During the early 1990's, groundwater pumping increased tremendously because of the reduced CVP water supplies caused by an extended drought, and regulatory actions related to the Central Valley Project Improvement Act (CVPIA), Endangered Species Act (ESA), and Bay/Delta water quality actions. Groundwater pumping quantities are estimated to have reached 600,000 af per year during 1991 and 1992 when Westlands received only 25 percent of its contractual entitlement of CVP water. The increase in pumping caused a decline in groundwater levels, but has since recovered. Normal or near normal CVP water supplies from 1995–1999 have reduced the estimated annual quantity of groundwater pumped to approximately 60,000 af per year, resulting in an increase in water surface elevations. However, since 2000, Westlands' water supply has been considerably reduced resulting in groundwater pumping to increase to over 200,000 af per year.

Semitropic

Semitropic is located in north-central Kern County in the San Joaquin Valley, about 20 miles northwest of the City of Bakersfield. The total area of Semitropic is 220,000 acres with about 159,000 acres irrigated. Annual crop demands in Semitropic are about

Semitropic Bank

During the 1960's, Semitropic developed plans for main conveyance and distribution system facilities to extend from the California Aqueduct to farm delivery locations. Prior to these deliveries, the irrigated agriculture within Semitropic was totally dependent on pumping the underlying groundwater.

In 1995, Semitropic began implementation of the Semitropic Groundwater Banking and Exchange Program (Program). The Program is a long-term water storage program designed to recharge groundwater and reduce overdraft, increase operational reliability and flexibility, and optimize the distribution and use of available water resources between Semitropic and potential banking partners. Under the program, the banking partner would deliver a portion of its unused SWP, CVP, or other surface water supplies to Semitropic during periods when such water is available. Semitropic may use this water in lieu of pumping groundwater for irrigation or directly recharge the underlying groundwater basin. Upon request, Semitropic would return the banking partner's previously stored water by exchange. The banking partner's stored water may be pumped from Semitropic's groundwater basin through pump-back facilities into the California Aqueduct and provided to DWR in exchange for SWP water delivered to the partners from the Delta; or Semitropic would retain the stored water for its own use in exchange for an equivalent portion of its SWP water supply. Under the first method (delivery of recovered banked water to the California Aqueduct), the water is delivered to the SWP water supply pool from which deliveries would be made to the banking partners.

CVP water (including the amount involved in the proposed action) that has been previously stored by Westlands at Semitropic has been stored using available capacity in Semitropic'c Original Banking Program (Phase 1) facilities capacity. Semitropic's Phase 1 Banking Program capacity using existing facilities is 1,000,000 af. Total program annual withdrawal amounts are restricted by the size of the pump-back facility, contemporaneous scheduled SWP deliveries to the Groundwater Bank, and the proportion of the total program capacity that has been contracted to other banking partners. The annual withdrawal capacity includes up to 133,000 af of SWP water that could be exchanged within the California Aqueduct, and/or an additional 90,000 af per year of groundwater extraction to the California Aqueduct. Thus, the return capacity of the original program is a minimum of 90,000 af per year, and a maximum of 223,000 af per year.

Groundwater

The Tulare Lake Hydrologic Region comprises the drainage area of the San Joaquin Valley south of the San Joaquin River. The Tulare Lake Hydrologic Region is essentially

Semitropic resides within the Kern County groundwater sub-basin. The Kern County groundwater sub-basin includes the Kern River and the Poso Creek drainage areas, as well as the drainage areas of west-side streams in Kern County. The Kern County sub-basin has been identified by DWR as being critically over drafted. By definition, a basin is subject to critical conditions of overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts.

Extensive groundwater recharge programs, or water banks, are in place in the south valley where water districts have recharged several million af of surplus water for future use and transfer through water banking programs. For more than 100 years, water supply and irrigation districts throughout the region have used conjunctive-use to maximize water supply and maintain the groundwater system. Other conjunctive-use activities throughout the valley include water exchange and transfer programs. If groundwater extraction continues to be used to offset anticipated, but unmet, surface water imports, it would have negative consequences.

One such effect of long-term groundwater overdraft is land subsidence, which also results in a loss of aquifer storage space. This has already caused some damage to canals, utilities, pipelines, and roads in the region. Another effect of long-term groundwater overdraft is groundwater quality degradation. Groundwater overdraft in a basin can produce a gradient that induces movement of water from adjacent areas. If the adjacent areas contain poor quality water, degradation can occur in the basin. Many water agencies have adopted groundwater replenishment programs and have taken advantage of excess water supplies available in wet years, incidental deep percolation, and seepage from unlined canals in an effort to prevent groundwater overdraft that could result in land subsidence and water quality degradation.

A groundwater monitoring program was established in 1994 to develop information so that any adverse groundwater impacts of the Semitropic water banking project could be mitigated. The monitoring program is overseen by a committee made up of Semitropic, adjoining districts (including Buena Vista Water Storage District, Rosedale-Rio Bravo Water Storage District, Shafter-Wasco Irrigation District, North Kern Water Storage District, and Southern San Joaquin Municipal Utility District), and banking participants. Kern County Water Agency and DWR are interested parties and participate in committee activities and water scheduling. Monitoring has included water level measurement in monitoring wells and groundwater quality (including salinity and nitrate) evaluations (Semitropic, 1994).

In addition, activities of Semitropic and the adjoining activities that affect groundwater conditions have been obtained and compiled. Included are diversions of surface water into each district, crop surveys and estimates of crop consumptive-use, and, where available, groundwater pumping data. A report on the committee's activity and groundwater conditions is published every two years.

Further information on the affected environment in these water districts is included in

Reclamation's 2006 Storage and Exchange of Central Valley Project Water Westlands Water District to Semitropic Water Storage District EA/FONSI, which is hereby incorporated by reference.

Environmental Consequences

No Action

Under the no action alternative, the additional water supply of up to 8,086 af would not be available for use to support irrigation of existing crops in Semitropic.

Proposed Action

The proposed action involves water that was previously banked using available capacity in Semitropic's Phase 1 existing facilities. Water would be made available for delivery by utilizing existing on-farm wells which have the capability of dropping water in Semitropic's existing conveyance facilities. The water would be made available for delivery using Semitropic's existing Phase 1 facilities, and would not utilize any facilities that are part of the Stored Water Recovery Unit.

The up to 8,086 af of water that would be transferred to Semitropic under the proposed action would be used for Semitropic's support of existing agricultural uses, and would occur within the CVP place-of-use. The proposed action would involve previously banked water, and thus would result in no change or impact to CVP operations or to Delta pumping by the CVP. Since Westlands has control over initiating the proposal for this transfer, the reasonable assumption is made that Westlands would not be negatively impacted regarding needed water deliveries, otherwise they would not have requested Reclamation approval of the transfer.

The remainder of Westlands' previously banked water would be available for return to Westlands, upon approval, to offset shortages as needed in Westlands for the near future, which could provide surface water to offset dependence on groundwater in the near term during the current dry period. Once this supply is exhausted, however, Poso Creek lands in Westlands would rely more heavily on groundwater. However, potential banking during future wet periods could potentially reduce dependence on groundwater. The proposed action would further sustain the Semitropic groundwater aquifer and provide recharge (a deposit of groundwater) for the benefit of Semitropic to offset groundwater extraction occurring to meet crop demands on District farmlands.

3.2 Biological Resources

Affected Environment

The biological resources in Westlands and Semitropic are similar to those found in other agricultural areas of the San Joaquin Valley. The potentially affected area is dominated by agricultural habitat that includes field crops, orchards, and pasture. Vegetation consists primarily of crops, and frequently includes weedy non-native annual and biennial plants.

A list of federally listed, proposed and candidate species potentially occurring in Fresno, Kern and Kings Counties was obtained on July 30, 2008, by accessing the U.S. Fish and Wildlife Service (Service) Database (Appendix).

Environmental Consequences

No Action

Under the no action alternative, no water would be transferred, which is not anticipated to have an impact on fish and wildlife resources.

Proposed Action

The proposed action would have no effect on any biological resources, including special status species. Because it would involve water that Westlands had previously banked at Semitropic, water would not physically move under the proposed action. The proposed action would not change how water or land is managed. The water transferred under the proposed action would be used to support irrigated lands already in agricultural production and would be made available using Semitropic's existing Phase 1 facilities.

Also, with implementation of the proposed action, CVP operations would be consistent with existing operating and conveyance agreements. The proposed action would be consistent with the actions covered by previous analyses and would not result in any changes from existing operations or conditions.

Because of the previously discussed factors, Reclamation has determined that the proposed action would have no effect on special status species, with the potential to occur in the project area of effect. Therefore, no further consultation is required under Section 7 of the Endangered Species Act. However, the draft EA was provided to the Service for review and comment, and the final EA has been revised to include clarifications requested by the Service.

3.3 Cultural Resources

Affected Environment

Cultural resources is a term used to describe both 'archaeological sites' depicting evidence of past human use of the landscape and the 'built environment' which is represented in structures such as dams, roadways, and buildings. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA

The Section 106 process is outlined in the Federal regulations at 36 CFR Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

Environmental Consequences

No Action

The no action alternative would not result in an undertaking. There would be no change to existing conditions. Without an undertaking as defined by Section 301 of the NHPA, Reclamation would not initiate the Section 106 process. The no action alternative would result in no impacts to cultural resources.

Proposed Action

The proposed action would involve the redistribution of water through existing facilities. There would be no modification of water conveyance facilites and no activities that would result in ground disturbance. This action is administrative in nature and has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1). Because there is no potential to affect historic properties, no cultural resources would be impacted as a result of implementing the proposed action.

4. OTHER CONSIDERATIONS

4.1 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian Tribes or individuals. Trust status originates from rights imparted by treaties, statutes, or executive orders. These rights are reserved for or granted to tribes. A defining characteristic of an ITA is that such assets cannot be sold, leased, or otherwise alienated without Federal approval.

It is Reclamation policy to protect ITAs from adverse impacts of its programs and activities, whenever possible. Types of actions that could affect ITAs include an interference with the exercise of a reserved water right, degradation of water quality where there is a water right, impacts on fish and wildlife where there is a hunting or fishing right, or noise near a land asset where it adversely affects uses of the reserved land.

The nearest ITA to Westlands is Santa Rosa Rancheria, which is approximately six miles east of the project location. The nearest ITA to Semitropic is Santa Rosa Rancheria, which is approximately 32 miles NNW of the project location.

Environmental Consequences
No ITAs occur within the project area. Under the proposed action, there would be no alterations of existing water rights. Therefore, no impacts to ITAs would occur as a result of the no action or proposed action alternatives.

4.2 Environmental Justice

Executive Order 12898 requires each Federal agency to achieve environmental justice as part of its mission, by identifying and addressing disproportionately high adverse human health or environmental effects, including social and economic effects, of its programs and activities on minority populations and low-income populations of the United States.

Environmental Consequences

The no action alternative would have no effect on low-income or minority individuals within the project area.

No significant changes in agricultural communities or practices would result from the proposed action.

5. CUMULATIVE IMPACTS

According to the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA Guidelines section 15065(a)(3), a cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

Westlands has worked closely with Poso Creek Water Company, LLC (Poso Creek) to develop and enter into a long-term agreement in which Poso Creek is a full banking partner invested at 60,000 af of guaranteed storage capacity in the Semitropic water bank.

Poso Creek, as facilitated by cooperation with Westlands, has banked a net balance of 21,572 af of CVP water stored within Semitropic. This CVP water was banked during 2005-2007 under several separate actions. The environmental impacts of these previous banking actions were analyzed in the EAs titled, *Storage and Exchange of Central Valley Project Water Westland Water District in Semitropic Water Storage District, Final Environmental Assessment, November 2005(EA05-96); Storage of Central Valley Project Water from Westland Water District in Semitropic Water Storage District, September 2006 (EA06-78); Storage of Central Valley Project Water from Westland Water District in Semitropic Water Storage District, September 2006 (EA06-78);* and *Madera Irrigation District Transfer, Banking and Exchange of Friant Central Valley Project water to Westlands Water District as Facilitated by North Kern Water Storage District and Kern County Water Agency, January 2007(EA07-01).*

Following the transfer described in the proposed action, Westlands has proposed a water transfer mechanism that considers the Semitropic transfer up to 7,436 af of their State Water Project (SWP) Table A water (allocated to them by Kern County Water Agency (KCWA)) to Wheeler Ridge-Maricopa Water Storage District (WRMWSD). Westlands has agreed to cooperate with the transfer to Semitropic to allow a subsequent transfer to WRMWSD in order to help meet some of the anticipated crop water demand shortages on Poso Creek lands within WRMWSD. While some of Poso Creek's owners have land in Westlands that includes approximately 5,700 acres of permanent plantings, some of Poso Creek's ownership also own about 10,000 acres of permanent plantings in WRMWSD. Westlands recognizes the unique nature of Poso Creek's banking assets, its common landownership in WRMWSD, and desires to assist one of Westlands' landowners with a water shortage in Kern County. Semitropic would make the water available for delivery via WRMWSD turnouts in Reaches 14A-16A of the California Aqueduct to meet crop demands on Poso Creek's lands within WRMWSD.

Westlands has also proposed a water transfer mechanism which considers that following the initial transfer described in the proposed action, Semitropic transfer up to 650 af of their State Water Project (SWP) Table A water to Oak Flat Water District (OFWD). Because of the existing drought conditions, OFWD needs additional water in 2008 for irrigation of permanent orchard crops. The water would be delivered via turnouts in Reach 2A of the California Aqueduct.

The decision to make both of these transfers falls under the discretion of Semitropic and KCWA, and is beyond the scope of the Federal decision of approving the transfer of previously stored water from Westlands to Semitropic. Approval of these transfers would fall under the discretion of the State of California Department of Water Resources. However, Reclamation's approval of the transfer of up to 8,086 af of Westlands' previously stored water to Semitropic may make additional water available for Semitropic to transfer to other entities.

The water transfer mechanism proposed by Westlands for transferring up to 650 af to OFWD also indicates that common landowners within OFWD and Del Puerto Water District (DPWD), a CVP Contractor, have agreed to fallow approximately 250 acres in

2008 consisting of 50 acres of walnuts (typical crop water use of 3.0 af/Acre), 130 acres of almonds (typical crop water use of 3.0 af/Acre) and 70 acres of corn (typical crop water use of 3.7 af/Acre), suggesting an average crop water use of about 3.2 af/acre, or a total of approximately 800 af for the 250 acres. These acres have been fallowed in order to allow a transfer of up to 650 af of DPWD's 2008 south of Delta CVP water to Westlands using existing conveyance facilities. This transfer would be implemented under the CVPIA accelerated water transfer protocol, for which potential environmental impacts were analyzed and disclosed in the 2006 *Accelerated Water Transfers and Exchanges South of Delta Contractors EA and FONSI.*

Also, in addition to the proposed action, Westlands has requested that Reclamation approve the return, by exchange with Semitropic, of up to 4,350 af of water that was previously banked in Semitropic. This water would be used in Westlands' Service Area. The potential environmental impacts of the banking and return of this water were analyzed and disclosed in the *2006 Storage and Exchange of Central Valley Project Water Westlands Water District to Semitropic Water Storage District Environmental Assessment and Finding of No Significant Impact.*

The cumulative effects of the proposed action and these other actions, would include:

- Westlands would:
    - Transfer up to 8,086 af of previously banked water to Semitropic.
    - Receive 4, 350 af return of previously banked water, via exchange, from Semitropic.
    - Receive up to 650 af of 2008 South of Delta CVP water via transfer from DPWD.
- Semitropic would:
    - Receive up to 8,086 af via transfer from Westlands (water previously banked at Semitropic).
    - Transfer up to 7,436 af to WRMWSD.
    - Transfer up to 650 af of 2008 SWP Table A water to OFWD.
- WRMWSD would receive up to 7,436 af.
- OFWD would:

- Transfer up to 650 af of 2008 South of Delta CVP water to Westlands.

The voluntary fallowing in DPWD would be for one season only and would only involve approximately 0.5percent of the 45,000 acres of agricultural land served by DPWD, and therefore would not constitute a land use change. Should drought conditions and water supply shortages dictate fallowing next year, it is anticipated that this acreage would be planted again and different acreage would be fallowed, as necessary. Therefore, the proposed action would not cumulatively contribute to any long-term land or water use changes.

Because these actions would involve South of Delta water supplies and service areas, they would result in no change to CVP operations or Delta pumping by the CVP. These actions would utilize existing conveyance facilities that are not managed for fisheries. No special status species occur in the conveyance facilities that would be utilized. The proposed voluntary land fallowing in DPWD is not anticipated to have any effect on any species, including special status species, as it would be a short-term action lasting only one season.

The proposed action would involve relatively small amounts of water and would not contribute to any long-term land or water use changes or affect any other resource categories. Therefore, the proposed action would not significantly contribute to a cumulative impact on any resource category.

6. CONSULTATION/COORDINATION

This EA has been prepared in accordance with the requirements of NEPA. Reclamation is also complying with other applicable laws including the Clean Water Act of 1977, Clean Air Act of 1970, Endangered Species Act, Fish and Wildlife Coordination Act, National Historic Preservation Act of 1966, Executive Order 11988 - Flood Plain Management, Executive Order 11990 - Protection of Wetlands, Farmland Protection Policy Act, and the Wild and Scenic Rivers Act.

The proposed action has been coordinated with the Service, Westlands, Semitropic, WRMWSD, OFWD, DPWD, and the State of California Department of Water Resources.

7. LIST OF PREPARERS AND REVIEWERS

8. PUBLIC INVOLVEMENT

The draft EA and FONSI were circulated to interested parties for a 30-day public review period, beginning August 4, 2008. It was posted on Reclamation's Mid-Pacific (MP) Region NEPA Web site and the MP Region Water Acquisition Web site. Comments were received from the Service and in response, the EA has been revised to include clarifications requested regarding location of the stored water and mechanism to make the water available.

9. REFERENCES

Reclamation 1994. Semitropic Groundwater Banking Project EIS/EIR.

Reclamation 2005. Storage and Exchange of Central Valley Proejct Water Westland Water District in Semitropic Water Storage District Final EA/FONSI, November 2005 (EA05-96).

Reclamation 2006. Accelerated Water Transfers and Exchanges South of Delta Contractors Water Year 2006-2010.

Reclamation 2006. Storage and Exchange of Central Valley Project Water from Westlands Water District in Semitropic Water Storage District EA/FONSI (EA 06-78).

Reclamation 2007. Madera Irrigation District Transfer, Banking and Exchange of Friant Central Valley Project Water to Westlands Water District as Facilitated by North Kern Water Storage District and Kern County Water Agency (EA07-01).

Reclamation 2007. San Luis and Delta-Mendota Water Authority and San Joaquin River Exchange Contractors Water Authority Substitute Water Exchange Environmental Assessment.

The above information was used in preparing this EA and is incorporated into this document by reference. Sources for the referenced documentation may be obtained by contacting the lead agency.

APPENDIX

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 080730054104

Database Last Updated: January 31, 2008

No quad species lists requested.

County Lists

Fresno County

Listed Species

Invertebrates

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Oncorhynchus (=Salmo) clarki henshawi

Lahontan cutthroat trout (T)

Oncorhynchus (=Salmo) clarki seleniris

Paiute cutthroat trout (T)

Oncorhynchus mykiss

Central Valley steelhead (T) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

Rana aurora draytonii

California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Birds

Gymnogyps californianus
California condor (E)

Mammals

Dipodomys ingens
giant kangaroo rat (E)

Dipodomys nitratoides exilis
Critical habitat, Fresno kangaroo rat (X)
Fresno kangaroo rat (E)

Dipodomys nitratoides nitratoides
Tipton kangaroo rat (E)

Ovis canadensis californiana
Sierra Nevada (=California) bighorn sheep (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Calyptridium pulchellum
Mariposa pussy-paws (T)

Camissonia benitensis
San Benito evening-primrose (T)

Castilleja campestris ssp. succulenta
Critical habitat, succulent (=fleshy) owl's-clover (X)
succulent (=fleshy) owl's-clover (T)

Caulanthus californicus
California jewelflower (E)

Cordylanthus palmatus
palmate-bracted bird's-beak (E)

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)

Orcuttia inaequalis
Critical habitat, San Joaquin Valley Orcutt grass (X)
San Joaquin Valley Orcutt grass (T)

Orcuttia pilosa
Critical habitat, hairy Orcutt grass (X)

Pseudobahia bahiifolia
Hartweg's golden sunburst (E)

Pseudobahia peirsonii
San Joaquin adobe sunburst (T)

Sidalcea keckii
Critical habitat, Keck's checker-mallow (X)
Keck's checker-mallow (=checkerbloom) (E)

Candidate Species

Amphibians

Bufo canorus
Yosemite toad (C)

Rana muscosa
mountain yellow-legged frog (C)

Mammals

Martes pennanti
fisher (C)

Kern County

Listed Species

Invertebrates

Branchinecta conservatio
Conservancy fairy shrimp (E)

Branchinecta longiantenna
Critical habitat, longhorn fairy shrimp (X)
longhorn fairy shrimp (E)

Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Euproserpinus euterpe
Kern primrose sphinx moth (T)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana aurora draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Birds

Charadrius alexandrinus nivosus
western snowy plover (T)

Empidonax traillii extimus
Critical habitat, southwestern willow flycatcher (X)
southwestern willow flycatcher (E)

Gymnogyps californianus
California condor (E)
Critical habitat, California condor (X)

Vireo bellii pusillus
Least Bell's vireo (E)

Mammals

Dipodomys ingens
giant kangaroo rat (E)

Dipodomys nitratoides nitratoides
Tipton kangaroo rat (E)

Ovis canadensis californiana
Sierra Nevada (=California) bighorn sheep (E)

Sorex ornatus relictus
Buena Vista Lake shrew (E)
Critical habitat, Buena Vista Lake shrew (X)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Caulanthus californicus
California jewelflower (E)

Eremalche kernensis
Kern mallow (E)

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)

Opuntia treleasei
Bakersfield cactus (E)

Pseudobahia peirsonii
San Joaquin adobe sunburst (T)

Sidalcea keckii
Critical habitat, Keck's checker-mallow (X)
Keck's checker-mallow (=checkerbloom) (E)

Candidate Species

Amphibians

Rana muscosa
mountain yellow-legged frog (C)

Birds

Coccyzus americanus occidentalis

Western yellow-billed cuckoo (C)

Mammals

Martes pennanti
fisher (C)

Kings County

Listed Species

Invertebrates

Branchinecta lynchi
Critical habitat, vernal pool fairy shrimp (X)
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
Critical habitat, vernal pool tadpole shrimp (X)
vernal pool tadpole shrimp (E)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
Critical habitat, CA tiger salamander, central population (X)

Rana aurora draytonii
California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila
blunt-nosed leopard lizard (E)

Thamnophis gigas
giant garter snake (T)

Birds

Gymnogyps californianus
California condor (E)

Mammals

Dipodomys ingens
giant kangaroo rat (E)

Dipodomys nitratoides exilis
Fresno kangaroo rat (E)

Dipodomys nitratoides nitratoides
Tipton kangaroo rat (E)

Vulpes macrotis mutica
San Joaquin kit fox (E)

Plants

Monolopia congdonii (=Lembertia congdonii)
San Joaquin woolly-threads (E)

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** proje within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by t

list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist o botanist, familiar with the habitat requirements of the species on your list, should determi whether they or habitats suitable for them may be affected by your project. We recommer that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environment documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that n result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together t avoid or minimize the impact on listed species and their habitat. Such consultation would resu in a biological opinion by the Service addressing the anticipated effect of the project on listed proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and a likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct a indirect impacts to listed species and compensates for project-related loss of habitat. You shou include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essenti to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these

lands are not restricted unless there is Federal involvement in the activities or direct harm listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose th for listing as threatened or endangered. By considering these species early in your plannir process you may be able to avoid the problems that could develop if one of these candida was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defir by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, yo will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be Octol 28, 2008.